

Exhibit 1

(REDACTED VERSION OF
DOCUMENT TO BE SEALED)

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1 UNITED STATES DISTRICT COURT
2 EASTERN DISTRICT OF MICHIGAN

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4 JASON COUNTS, DONALD KLEIN, C.A. NO.
5 OSCAR ZANORA, DEREK LONG, 1:16-CV-12541-TLL-PTM
6 HASSAM HIRMIZ, JASON SILVEUS,
7 JOHN MISKELLY, THOMAS HAYDUK,
8 CHRISTOPHER HEMBERGER and
9 JOSHUA RODRIGUEZ, individually
and on behalf of all others similarly
situated,

Plaintiffs,

-against-

10 GENERAL MOTORS LLC, ROBERT
11 BOSCH GMBH, and ROBERT
12 BOSCH, LLC,
Defendants.

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16
17 VIRTUAL VIDEOTAPED DEPOSITION OF RYAN HARRINGTON
18 NATICK, MASSACHUSETTS
19 Thursday, July 23, 2020
20

VOLUME 2

21
22
23 REPORTED BY:
24 ROBIN CLARK, RPR, CLR
25

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<p style="text-align: right;">Page 320</p> <p>1 Virtual Videotaped Deposition of RYAN 2 HARRINGTON, taken by Plaintiffs, pursuant to notice, 3 commencing at 10:12 a m., by and before Robin L. 4 Clark, Registered Professional Reporter and Notary 5 Public in and for the Commonwealth of Pennsylvania. 6 ----- 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 322</p> <p>1 REMOTE APPEARANCES, continued: 2 3 CLEARY GOTTLIEB STEEN & HAMILTON, LLP 4 BY: DAVID BRODSKY, ESQ 5 PATRICK SWIBER, ESQ 6 RENEE GRIFFIN, ESQ 7 2000 Pennsylvania Avenue, N W 8 Washington, D C 20006 9 202-947-1588 10 dbrodsky@cgsh.com 11 pswiber@cgsh.com 12 rgriffin@cgsh.com 13 For the Defendant Robert Bosch 14 LLC 15 16 ALSO PRESENT REMOTELY: 17 18 STEVEN HURVITZ, ESQ 19 20 HOWARD BRODSKY, VIDEOGRAPHER 21 22 JUSTON SMITHERS 23 24 ALI KRAL, TECHNICIAN 25 ----- 26 27 28 29 30 31 32 33 34 35</p>
<p style="text-align: right;">Page 321</p> <p>1 REMOTE APPEARANCES: 2 3 HAGENS BERMAN SOBOL SHAPIRO, LLP 4 BY: GARTH WOJTANOWICZ, ESQ 5 STEVE BERMAN, ESQ 6 JESSICA THOMPSON, ESQ 7 1301 Second Avenue, Suite 2000 8 Seattle, Washington 98101 9 206-623-7292 10 garthw@hbsslaw.com 11 sberman@hbsslaw.com 12 jthompson@hbsslaw.com 13 For the Plaintiffs 14 15 CARELLA, BYRNE, CECCHI, OLSTEIN, BRODY & 16 AGNELLO, P C 17 BY: JAMES E CECCHI, ESQ 18 ZACHARY BOWER, ESQ 19 5 Becker Farm Road 20 Roseland, New Jersey 07068 21 973-997-1700 22 jcecchi@carellabyrne.com 23 zbower@carellabyrne.com 24 For the Plaintiffs 25 26 SEEGER WEISS, LLP 27 BY: SHAUNA ITRI, ESQ 28 1515 Market Street, Suite 1380 29 Philadelphia, Pennsylvania 19102 30 215-564-2300 31 sitri@seegerweiss.com 32 For the Plaintiffs 33 34 KIRKLAND & ELLIS, LLP 35 BY: RENEE D SMITH, ESQ 36 KATE WARNER, ESQ 37 300 North LaSalle 38 Chicago, Illinois 60654 39 312-862-2000 40 rdsmith@kirkland.com 41 kate.warner@kirkland.com 42 For the Defendant General 43 Motors LLC 44 45</p>	<p style="text-align: right;">Page 323</p> <p>1 I N D E X 2 WITNESS PAGE 3 RYAN HARRINGTON 4 BY MR WOJTANOWICZ: 327, 676 5 BY MS SMITH: 649 6 7 E X H I B I T S 8 NUMBER DESCRIPTION MARKED 9 Harrington 10 Exhibit 5 Dyno HP Coefficient 333 11 Determination Bates 12 GMCOUNTS000852163 to 852211 13 Exhibit 6 Privately-Owned Vehicle 341 14 Work Order Bates 15 GMCOUNTS000852050 16 Exhibit 7 Privately-Owned Vehicle 346 17 Work Order Bates 18 GMCOUNTS000851986 to 851987 19 Exhibit 8 Driver's Checklist Bates 346 20 GMCOUNTS000852149 to 852150 21 22 Exhibit 9 Calculator Document Bates 362 23 GMCOUNTS000852229 24 Exhibit 10 HWFET Chart 373 25 Exhibit 11 Email dated 5/16/19 Bates 400 26 GMCOUNTS000852424 27 28 Exhibit 12 Email String Bates 407 29 GMCOUNTS000852421 TO 852422 30 Exhibit 13 07_GM Diesel PEMS 428 31 Evaluation - MY14 Cruze 32 Bates GMCOUNTS000379567 to 33 379574 34 35 Exhibit 14 Deposition of Sarah Funk 449 36 37 Exhibit 15 Chevrolet Cruze Diesel 467</p>

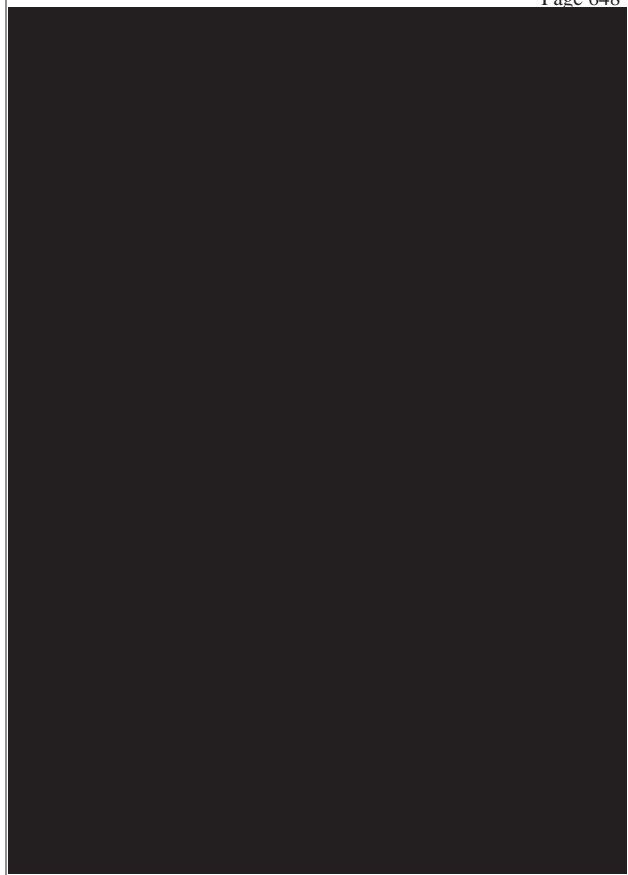

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<p style="text-align: right;">Page 648</p> 	<p style="text-align: right;">Page 650</p> <p>1 BY MS. SMITH:</p> <p>2 Q. Good afternoon, Mr. Harrington. I</p> <p>3 just have a few questions for you this</p> <p>4 afternoon. Do you recall Plaintiffs' counsel</p> <p>5 asking you questions about the process for</p> <p>6 drafting your expert report in this case, which</p> <p>7 is Exhibit 1?</p> <p>8 A. I do.</p> <p>9 Q. And I believe you mentioned several</p> <p>10 people from Exponent and from Analysis Group</p> <p>11 who may have assisted in drafting and preparing</p> <p>12 materials for that report. Do you recall</p> <p>13 those?</p> <p>14 A. I recall providing a list of</p> <p>15 people, yes.</p> <p>16 Q. Okay. And is this a report, which</p> <p>17 is Exhibit 1 to this deposition, is this report</p> <p>18 your opinions or is it the opinions of the</p> <p>19 people who supported you in preparing it?</p> <p>20 A. So these are my opinions and this</p> <p>21 was drafted at my direction.</p> <p>22 Q. And have you read everything in</p> <p>23 this report?</p> <p>24 A. Yes.</p> <p>25 Q. Are the statements in this report</p>
<p style="text-align: right;">Page 649</p>  <p>4 MR. WOJTANOWICZ: Okay. At</p> <p>5 this time, I have no further questions.</p> <p>6 Although, Renee, I will note that we</p> <p>7 are going to reserve our rights to</p> <p>8 reopen the deposition in light of the</p> <p>9 issue that we have regarding his --</p> <p>10 which I know you're going to address in</p> <p>11 your redirect, at any rate, we're going</p> <p>12 to reserve our right to reopen, but for</p> <p>13 the time being, we will turn the floor</p> <p>14 over to you.</p> <p>15 MS. SMITH: Thank you.</p> <p>16 Should we go off the record, please?</p> <p>17 MR. WOJTANOWICZ: Sure.</p> <p>18 THE VIDEOGRAPHER: The time</p> <p>19 is 6:38. We are off the record.</p> <p>20 -----</p> <p>21 (Discussion was held off the record.)</p> <p>22 -----</p> <p>23 THE VIDEOGRAPHER: The time</p> <p>24 is 7:18. We're on the record.</p> <p>25</p>	<p style="text-align: right;">Page 651</p> <p>1 yours?</p> <p>2 A. Yes.</p> <p>3 Q. And I believe we may have loaded</p> <p>4 the next exhibit, which you don't have in hard</p> <p>5 copy. Let's see if this worked. It did. So</p> <p>6 Exhibit 23 should be open there.</p> <p>7 A. Okay.</p> <p>8 -----</p> <p>9 (CVs of Exponent Employees marked</p> <p>10 Harrington Exhibit 23 for</p> <p>11 identification.)</p> <p>12 -----</p> <p>13 BY MS. SMITH:</p> <p>14 Q. Do you have Exhibit 23 in front of</p> <p>15 you?</p> <p>16 A. Yes, I have it on screen.</p> <p>17 MS. SMITH: Okay. Garth, do</p> <p>18 you have it?</p> <p>19 MR. WOJTANOWICZ: I do,</p> <p>20 thank you.</p> <p>21 BY MS. SMITH:</p> <p>22 Q. And I'm just going to tick through</p> <p>23 this quickly, but the first page is a CV for</p> <p>24 Jeffrey Wishart; is that correct?</p> <p>25 A. Correct.</p>

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<p style="text-align: right;">Page 672</p> <p>1 MR. WOJTANOWICZ: Object to</p> <p>2 form.</p> <p>3 THE WITNESS: So there was</p> <p>4 aspects of the single vehicle test that</p> <p>5 were used, but there was additional</p> <p>6 information that was used to determine</p> <p>7 or to do the investigation. It wasn't</p> <p>8 just based on that. That can tip them</p> <p>9 off to it, but there's more work that</p> <p>10 was done.</p> <p>11 BY MS. SMITH:</p> <p>12 Q. You've referenced throughout the</p> <p>13 past couple of days various data and tests</p> <p>14 related to the Cruze diesel's emissions</p> <p>15 performance. I just want to tick through</p> <p>16 those. Was one of the things you relied upon</p> <p>17 in your report testing conducted in connection</p> <p>18 with certification of the vehicle?</p> <p>19 A. Yes.</p> <p>20 Q. Have you seen anything suggesting</p> <p>21 that the EPA has raised questions regarding</p> <p>22 whether that certification testing is</p> <p>23 unreliable?</p> <p>24 A. I have not seen any evidence like</p> <p>25 that.</p>	<p style="text-align: right;">Page 674</p> <p>1 attorney. As an engineer, do you have to from</p> <p>2 time to time use your engineering judgment to</p> <p>3 determine what the most likely explanation is</p> <p>4 for the facts that you're faced with? Do you</p> <p>5 remember that question?</p> <p>6 A. Yes.</p> <p>7 Q. Based on your engineering judgment,</p> <p>8 given the body of testing and data available</p> <p>9 before this litigation, what is the most likely</p> <p>10 explanation of why Mr. Smithers' test</p> <p>11 results -- why Mr. Smithers' PEMS test results</p> <p>12 came out as they did?</p> <p>13 MR. WOJTANOWICZ: Object to</p> <p>14 the form.</p> <p>15 THE STENOGRAPHER: Wait a</p> <p>16 minute, why Mr. Smithers what?</p> <p>17 MS. SMITH: Test results</p> <p>18 came out as they did.</p> <p>19 THE WITNESS: So at the</p> <p>20 multiparty inspection, there was</p> <p>21 documented issues with the vehicle that</p> <p>22 could have impacted things during the</p> <p>23 testing. There was a test result on a</p> <p>24 dyno test that was outside of the</p> <p>25 limits, which obviously calls into</p>
<p style="text-align: right;">Page 673</p> <p>1 Q. Does Mr. Smithers opine that the</p> <p>2 certification testing GM did for its</p> <p>3 certificates of conformity was unreliable?</p> <p>4 A. I don't recall a discussion of that</p> <p>5 in his report or deposition.</p> <p>6 Q. And you also relied on some of the</p> <p>7 in-use testing that's discussed at Table 5-1;</p> <p>8 is that correct?</p> <p>9 A. Correct.</p> <p>10 Q. Does Mr. Smithers opine that that</p> <p>11 testing is unreliable?</p> <p>12 A. I don't recall a discussion in his</p> <p>13 report or deposition on those -- on that topic.</p> <p>14 Q. To the best of your -- based on the</p> <p>15 materials you reviewed, has the EPA questioned</p> <p>16 whether the data, GM's in-use testing data is</p> <p>17 unreliable?</p> <p>18 A. I've not seen any evidence along</p> <p>19 those lines.</p> <p>20 Q. And is the answer the same with</p> <p>21 respect to CARB?</p> <p>22 A. I've not seen any evidence that</p> <p>23 CARB has concerns.</p> <p>24 Q. You were asked some questions or</p> <p>25 you were asked this question by Plaintiffs'</p>	<p style="text-align: right;">Page 675</p> <p>1 question the reliability of that</p> <p>2 vehicle. And then the way that Mr.</p> <p>3 Smithers analyzed the data and his</p> <p>4 discussion of AC use and other aspects</p> <p>5 or of hills were understated.</p> <p>6 BY MS. SMITH:</p> <p>7 Q. In your engineering judgment, given</p> <p>8 the issues with Mr. Smithers' single test</p> <p>9 vehicle, are his PEMS tests reliable, PEMS test</p> <p>10 results reliable?</p> <p>11 A. Based on the vehicle and how he</p> <p>12 conducted the test, no.</p> <p>13 Q. Based on your experience, would it</p> <p>14 be sound engineering judgment to rely on</p> <p>15 testing of this one particular vehicle given</p> <p>16 the issues you've discussed?</p> <p>17 A. No, and especially without any</p> <p>18 investigation on his part to understand why he</p> <p>19 got some anomalous results or verified that</p> <p>20 repairs made during the testing were done</p> <p>21 appropriately.</p> <p>22 MS. SMITH: I think that's</p> <p>23 all I have. Let me -- we can just go</p> <p>24 off and stay put for one minute. Let</p> <p>25 me take one quick look and then I think</p>

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